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EXAMINER

BLACKWELL RUDASIL, GWENDOLYN A

| ART UNIT | PAPER NUMBER |
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1775

DATE MAILED: 03/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/775,343

Applicant(s)

LIN, YUPING

Examiner

Gwendolyn Blackwell-Rudasill

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 9-16 and 19-21 is/are rejected.
- 7) ☒ Claim(s) 6-8, 17 and 18 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>2/04, 5/04, 11/04</u> . | 6) <input type="checkbox"/> Other: ____. |

2c

DETAILED ACTION

1. Claims 1-21 are currently pending and are examined on the merits.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 13, 15-16, and 19-21 are rejected under 35 U.S.C. 102(b) as being anticipated by United States Patent no. 5,132,161, Shibata et al.

Regarding claim 13

Shibata et al disclose a window glass with a coating stack formed thereon comprised of a heat reflective layer. The component for the heat reflective layer is comprised of titanium nitride or chromium nitride or complexes of both, (column 3, lines 21-40), meeting the requirements of claim 13.

Regarding claims 15 and 21

The coating structure can be:

glass/dielectric/heat reflective layer/dielectric,

wherein the heat reflective layer is in direct contact with the dielectric layer, (column 4, lines 3-17), meeting the requirements of claims 15 and 21.

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Regarding claims 16 and 19-20

When the structure recited in the reference is substantially identical to that of the claims, the claimed properties or function are presumed inherent. *MPEP 2112.01*. Because the prior art exemplifies Applicant's claimed layer structure, the claimed physical properties relating to ΔE^*_G , the chemical durability and the visible light transmission are inherently present in the prior art. Absent an objective showing to the contrary, the addition of the claimed physical properties to the claim language fails to provide patentable distinction over the prior art of record.

4. Claims 1-3, 5, 9, 11-16, 19, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by United States Patent no. 5,543,229, Ohsaki et al.

Regarding claims 1-2, 11, 13-15, and 21

Ohsaki et al disclose a coated glass having a multilayered coating structure comprised of a solar control layer, a protective layer formed on the solar control layer and an underlayer, (column 2, lines 11-14). The solar control layer can be a mixture of chromium and titanium nitrides. The protective layer can be silicon nitride with the underlayer comprised of the same material as the protective layer, (column 2, lines 15-62; column 3, lines 46-49), meeting the requirements of claims 1-2, 11, 13-15, and 21.

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Regarding claims 3 and 12

The silicon nitride layer can also have aluminum or oxygen present, (columns 2-3, lines 63-21), meeting the requirements of claim 3. The Ohsaki et al invention can be practiced on a heat treated or non-heated treated coated glass, (column 7, lines 23-36), meeting the requirements of claims 4 and 12.

Regarding claims 5, 9, 16, and 19

When the structure recited in the reference is substantially identical to that of the claims, the claimed properties or function are presumed inherent. *MPEP 2112.01*. Because the prior art exemplifies Applicant's claimed layer structure, the claimed physical properties relating to ΔE^*_G and the chemical durability are inherently present in the prior art. Absent an objective showing to the contrary, the addition of the claimed physical properties to the claim language fails to provide patentable distinction over the prior art of record.

Regarding the process limitations of claim 5, the patentability of a product does not depend on its method of production. If the product in the product by process claim is the same as or obvious from a product of the prior art, the claims are unpatentable even though the prior art was made by a different process. *MPEP 2113*.

5. Claims 1, 4-5, 9, 12-14, 16, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by United States Patent no. 5,935,702, Macquart et al.

Regarding claims 1 and 13-14

Macquart et al disclose a glass substrate having a multilayered coating stack thereon comprised of dielectric layers formed under and above a layer having infrared properties with a protective metallic layer placed underneath the dielectric layer formed above the layer having the infrared properties, (column 3, lines 17-26). The dielectric layer can be silicon nitride, (column

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3, lines 30-35). The metallic protective layer can be chromium or titanium or an alloy of the two metals. Once all layers are deposited the protective layer can be partially nitrated, (column 6, lines 8-29), meeting the requirements of claims 1 and 13-14.

Regarding claims 4 and 12

Macquart et al disclose that the present invention can be utilized under circumstances wherein the coated substrate is heat treated or not, (column 8, lines 57-67), meeting the requirements of claims 4 and 12.

Regarding claims 5, 9, 16 and 19

When the structure recited in the reference is substantially identical to that of the claims, the claimed properties or function are presumed inherent. *MPEP 2112.01*. Because the prior art exemplifies Applicant's claimed layer structure, the claimed physical properties relating to ΔE^*_G and the chemical durability are inherently present in the prior art. Absent an objective showing to the contrary, the addition of the claimed physical properties to the claim language fails to provide patentable distinction over the prior art of record.

Regarding the process limitations of claim 5, the patentability of a product does not depend on its method of production. If the product in the product by process claim is the same as or obvious from a product of the prior art, the claims are unpatentable even though the prior art was made by a different process. *MPEP 2113*.

6. Claims 1-2, 5, 9-10, 13-16, and 19-20 are rejected under 35 U.S.C. 102(b) as being anticipated by United States Patent no. 6,313,577, Kunisada et al.

Regarding claims 1-2 and 13-15

Kunisada et al disclose an optical article comprised of a glass substrate, a dielectric film, a light absorbing film, a transparent dielectric film, a light absorbing film, and a dielectric film,

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(column 4, lines 40-50). The light absorbing film can be a mixture of titanium nitride and chromium nitride, (column 4, lines 16-22). The dielectric film can be silicon nitride, (columns 6-7, lines 62-1), meeting the requirements of claims 1-2 and 13-15.

Regarding claims 10 and 20

The optical article has a visible light transmittance of 30-50%, (column 4, lines 35-39), meeting the requirements of claims 10 and 20.

Regarding claims 5, 9, 16 and 19

When the structure recited in the reference is substantially identical to that of the claims, the claimed properties or function are presumed inherent. *MPEP 2112.01*. Because the prior art exemplifies Applicant's claimed layer structure, the claimed physical properties relating to ΔE^*_G and the chemical durability are inherently present in the prior art. Absent an objective showing to the contrary, the addition of the claimed physical properties to the claim language fails to provide patentable distinction over the prior art of record.

Regarding the process limitations of claim 5, the patentability of a product does not depend on its method of production. If the product in the product by process claim is the same as or obvious from a product of the prior art, the claims are unpatentable even though the prior art was made by a different process. *MPEP 2113*.

Allowable Subject Matter

7. Claims 6-8 and 17-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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While the prior art of record disclose that chromium nitride and titanium nitride can be combined in such a way to form the layer structure as exemplified by Applicant in present claims 1-5, 9-16, and 19-21, the prior art does not teach or disclose the ratio of Cr/Ti as exemplified in present claims 6-8 and 17-18.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gwendolyn Blackwell-Rudasill whose telephone number is (571) 272-1533. The examiner can normally be reached on Monday - Thursday, 5:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones can be reached on (571) 272-1535. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Gwendolyn Blackwell-Rudasill
Examiner
Art Unit 1775

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